

VERSION SHOWING THE CHANGES TO THE CLAIMS

This listing replaces all prior listings of the claims

IN THE CLAIMS

Amend the claims as follows:

1 (Currently amended). A process for inactivating and/or reducing pathogens from tissue ~~having a tissue axis and~~ having a plurality of cavities in which pathogens reside comprising:

centrifuging the tissue in a centrifuge with a flowing pathogen solvent reducing solution wherein the solution is flowed continuously to and away from the centrifuge containing the tissue to produce a G force on the material to remove material from the tissue and promote penetration into the tissue,; and

the centrifuging penetrating the pathogen reducing solution into substantially all of the cavities of the tissue where the pathogens reside to thereby inactivate and/or reduce the pathogen content in said cavities

2 (Original) The process of claim 1 wherein the solvent fluid is selected from at least one of the group consisting of an alcohol, a detergent, an oxidizer, a solvent and a surfactant.

Claim 3, canceled.

4 (Currently amended). The process of claim 1 including infusing a chemically reactive substance during at least one further centrifuging step for breaking down lips and/or proteins.

Claim 5, canceled.

6 (Currently amended). The process of claim ~~[[5]]~~ 1 including exposing the tissue to a volume of said reducing solution of greater than 3 liters.

Claims 7 and 8, canceled

9 (Currently amended). The process of claim ~~[[5]]~~ 1 wherein the G force exceeds ~~2000~~ 1600G.

10 (Currently amended). The process of claim ~~[[5]]~~ 1 including dry centrifuging the tissue after centrifuging the pathogen reducing solution to remove traces of solvents and debris.

11 (Currently amended). The process of claim ~~[[5]]~~ 1 wherein the tissue is at least one of cancellous bone, cortical bone, and connective tissue.

Claim 12, Canceled

13 (Currently amended) . The process of claim ~~[[5]]~~ 1 wherein the solvent reducing solution comprises at least one viral and/or bacterial pathogen inactivating solution to inactivate the pathogens.

14 (Currently amended). The process of claim ~~[[5]]~~ 1 wherein the solvent reducing solution is for inactivating viral and/or bacterial pathogens, the

centrifuging for flowing the solvent reducing solution to flush the pathogens from the cavities and inactivate the pathogens in the cavities and then removing the solvent reducing solution carrying the flushed pathogens from the vicinity of the tissue.

15 (Currently amended). The process of claim 1 wherein the tissue comprises bone, the pathogens comprise lipids and/or proteins, the solvent reducing solution for removing the lipids and/or proteins from the bone, the process comprising continuously flowing and centrifuging the pathogen reducing solvents and/or surfactants with the bone so that the solvents and/or surfactants continuously infuse into and out of the cavities of the bone to continuously flush the lipids and/or proteins from the bone.

16 (Currently amended). The process of claim 1 wherein the tissue comprises bone, the pathogens comprise lipids and/or proteins in the tissue cavities, the process for solublizing the lipids and/or proteins by centrifuging the bone with the pathogen reducing solvent and/or surfactant to cause the pathogen reducing solvent and/or surfactant to flow into substantially all of the cavities of the tissue.

17 (Currently amended) The process of claim 1 including infusing biologically and/or mechanically useful substances into the tissue cavities during a centrifuging step.

18 (Currently amended). The process of claim [[5]] 17 wherein the infusing step includes infusing at least one antibiotic for forming a tissue preservative during storage of the tissue.

19 (Currently amended). The process of claim 17 [[5]] wherein the infusing step includes infusing at least one antibiotic forming a tissue preservative during storage of the tissue and at least one tissue growth factor for release from the tissue after implantation of the tissue into an animal.

20 (Currently amended). The process of claim [[5]] 17 wherein the infusing the mechanically useful substance step includes infusing a plasticizer for maintaining tissue pliability after freeze drying or drying.

21 (Currently amended). The process of claim 17 [[5]] wherein the infusing the mechanically useful substance step includes infusing glycerol to maintain the tissue pliability after freeze drying or drying.

22 (Currently amended). The process of claim [[5]] 17 wherein the infusing the mechanically useful substance step includes infusing structurally enhancing materials, which are thermally or chemically set.

23 (Currently amended). The process of claim [[5]] 17 wherein the infusing the mechanically useful substance step includes infusing polymers, which are thermally or chemically set.

Claim 24, canceled

25 (Currently amended). A process for inactivating and/or reducing pathogens in bone tissue having a longitudinal axis and a plurality of cavities in which the pathogens reside comprising centrifuging the tissue with a pathogen solvent reducing solution to produce a G force on the tissue in a direction parallel to the bone longitudinal axis to remove the material from the tissue and promote solution penetration into the tissue, the centrifuging penetrating the pathogen reducing solution into substantially all of the cavities of the tissue where the pathogens reside to thereby inactivate and/or reduce the pathogen content in said cavities ~~The process of claim 24 including pathogens in the bone wherein the lipids and/or proteins coat the pathogens, the process further including providing a pathogen reducing fluid during the centrifuging for inactivating, reducing and/or removing the pathogens.~~

Claim 26, Canceled.

27 (Currently amended). The process of claim ~~26~~ 25 where the G force is at least 2000G.

Claims 28 and 29, canceled

30 (Currently amended) . The process of claim ~~26~~ 25 including dry centrifuging the tissue for removing the at least one solvent from the tissue and for removing contaminants separated by the centrifuging from the vicinity of the tissue.

31 (Currently amended). The process of claim 25 including infusing biologically and/or mechanically useful substances into the tissue cavities during a centrifuging step.

32 (Original). The process of claim 31 wherein the infusing step includes infusing at least one antibiotic for forming a tissue preservative during storage of the tissue.

33 (Original). The process of claim 31 wherein the infusing step includes infusing at least one antibiotic forming a tissue preservative during storage of the tissue and at least one tissue growth factor for release from the tissue after implantation of the tissue into an animal.

34 (Original). The process of claim 31 wherein the infusing the mechanically useful substance step includes infusing a plasticizer for maintaining tissue pliability after freeze drying or drying.

35 (Original). The process of claim 31 wherein the infusing the mechanically useful substance step includes infusing glycerol to maintain the tissue pliability after freeze drying or drying.

36 (Original). The process of claim 31 wherein the infusing the mechanically useful substance step includes infusing structurally enhancing materials, which are thermally or chemically set.

37 (Original). The process of claim 31 wherein the infusing the mechanically useful substance step includes infusing polymers, which are thermally or chemically set.

38 (Original). A process for introduction of at least one growth factor in animal tissue comprising centrifuging the tissue in the presence of a liquid containing the at least one growth factor.

39. The process of claim 31 wherein the infusing the mechanically useful substance includes infusing a polymer, which may be set by solvent removal, extraction or evaporation.

Claims 40-43, canceled.

Add the following claims:

44 (New). The process of claim 25 wherein the solvent fluid is selected from at least one of the group consisting of an alcohol, a detergent, an oxidizer, a solvent and a surfactant.

45 (New). A process for providing infusion of a radiation protectant into tissue having a plurality of cavities comprising centrifuging the tissue with a solution in a wet spin to produce a G force on the material to remove material from the tissue and promote solution penetration into the tissue, the centrifuging penetrating the radiation protectant into substantially all of the cavities of the tissue.

46 (New). A tissue made by any of the processes of claims 1, 25, 38 and 44.